# Contents of Volume

#### Volume 49 No. 1

#### ENVIRONMENTAL TOXICOLOGY AND RISK ASSESSMENT

- 1 Method for determining toxicologically relevant cadmium residues in the earthworm Eisenia fetida J. M. CONDER, L. D. SEALS & R. P. LANNO (USA)
- 9 Phytotoxicity of coloured substances: is Lemna Duckweed an alternative to the algal growth inhibition test?

M. CLEUVERS & H.-T. RATTE (Germany)

- 17 Toxicity and heavy metal contamination of surficial sediments from the Bay of Thessaloniki (Northwestern Aegean Sea) Greece
  K. ZABETOGLOU, D. VOUTSA & C. SAMARA (Greece)
- 27 Differences in the bioaccumulation of arsenic by oysters from Southeast coastal US and Chesapeake Bay: environmental versus genetic control G. F. RIEDEL & N. VALETTE-SILVER (USA)
- 39 Investigation of acute toxicity of beta-cypermethrin on guppies *Poecilia reticulata* H. POLAT, F. Ü. ERKOÇ, R. VIRAN & O. KOÇAK (Turkey)
- 45 Piscicidal effect of some common plants of India commonly used in freshwater bodies against target animals D. SINGH & A. SINGH (India)
- 51 Metabolism of the environmental estrogen bisphenol A by plant cell suspension cultures B. SCHMIDT & I. SCHUPHAN (Germany)
- 61 An examination of the physical properties, fate, ecotoxicity and potential environmental risks for a series of propylene glycol ethers C. A. STAPLES & J. W. DAVIS (USA)
- 75 In vitro EROD induction equivalency factors for the 10 PAHs generally monitored in risk assessment studies in The Netherlands
  - A. T. C. BOSVELD, P. A. F. DE BIE, N. W. VAN DEN BRINK, H. JONGEPIER & A. V. KLOMP (The Netherlands)
- 85 Trace elements in organs and tissues of striped dolphins (Stenella coeruleoalba) from the Mediterranean sea (Southern Italy)
  N. CARDELLICCHIO, A. DECATALDO, A. DI LEO & S. GIANDOMENICO (Italy)
- 91 Micronucleus distribution in human peripheral blood lymphocytes treated in vitro with cadmium chloride in G<sub>0</sub> and S phase of the cell cycle
  V. KASUBA & R. ROZGAJ (Croatia)
- 97 Occurrence of bisphenol A in surface water and uptake in fish: evaluation of field measurements A. BELFROID, M. VAN VELZEN, B. VAN DER HORST & D. VETHAAK (The Netherlands)
- 105 On the cytotoxicity of some microbial volatile organic compounds as studied in the human lung cell line A549

## L. KREJA & H.-J. SEIDEL (Germany)

#### Volume 49 No. 2

### PERSISTENT ORGANIC POLLUTANTS AND DIOXINS

- 111 Persistent organic pollutants in Detroit River suspended sediments: polychlorinated dibenzo-p-dioxins and dibenzofurans, dioxin-like polychlorinated biphenyls and polychlorinated naphthalenes
  - C. MARVIN, M. ALAEE, S. PAINTER, M. CHARLTON, P. KAUSS, T. KOLIC, K. MACPHERSON,
  - D. TAKEUCHI & E. REINER (Canada)

- 121 Use of the metastable atom bombardment (MAB) ion source for the elimination of PCDE interference in PCDD/PCDF analysis S. MOORE (Canada)
- 127 Correlation of PCDD/PCDF and CO values in a MSW incinerator—indication of memory effects in the high temperature/cooling section B. WEBER, T. SAKURAI, S. UENO & J. NISHINO (Japan)
- 135 Prediction of physico-chemical properties for PCDDs/DFs using the UNIFAC model with an alternative approximation for group assignment
  H. KURAMOCHI, M. OHSAKO, K. MAEDA & S. SAKAI (Japan)
- 143 Differential bioavailability of field-weathered p,p'-DDE to plants of the Cucurbita and Cucumis genera J. C. WHITE (USA)
- 153 PCDD/PCDF congener profiles in soil and herbage samples collected in the vicinity of a municipal waste incinerator before and after pronounced reductions of PCDD/PCDF emissions from the facility M. NADAL, M. C. AGRAMUNT, M. SCHUHMACHER & J. L. DOMINGO (Spain)
- 161 Polychlorinated dibenzo-p-dioxins, polychlorinated dibenzofurans and non-ortho, mono-ortho chlorine substituted biphenyls in Japanese human liver and adipose tissue S. TAKENAKA, T. TODAKA, M. NAKAMURA, T. HORI, T. IIDA, T. YAMADA & J.-I. HATA (Japan)
- 173 Long-term fate of the herbicide cinosulfuron in lysimeters planted with rice over four consecutive years J. K. LEE (South Korea), F. FÜHR (Germany), J. W. KWON & K. C. AHN (South Korea)
- 183 Analysis of six relevant toxaphene congeners in biological samples using ion trap MS/MS B. GOUTEUX, M. LEBEUF, S. TROTTIER & J.-P. GAGNÉ (Canada)
- 193 Semiconductor-mediated photocatalysed degradation of two selected priority organic pollutants, benzidine and 1,2-diphenylhydrazine, in aqueous suspension M. MUNEER, H. K. SINGH (India) & D. BAHNEMANN (Germany)
- 205 PCB levels and congener patterns from Korean municipal waste incinerator stack emissions M. G. IKONOMOU, P. SATHER (Canada), J.-E. OH, W.-Y. CHOI & Y.-S. CHANG (Korea)
- 217 Formation and transport of PCDD/Fs in the packed bed of soil containing organic chloride during a thermal remediation process
  S. HARJANTO, E. KASAI, T. TERUI & T. NAKAMURA (Japan)

## **ENVIRONMENTAL CHEMISTRY**

- 225 Concentrations of perfluorinated acids in livers of birds from Japan and Korea K. KANNAN (USA), J.-W. CHOI, N. ISEKI, K. SENTHILKUMAR (Japan), D. H. KIM (USA), S. MASUNAGA (Japan) & J. P. GIESY (USA)
- 233 Exploratory analysis of data sets with missing elements and outliers A. SMOLINSKI, B. WALCZAK (Poland) & J. W. EINAX (Germany)
- 247 Characterisation of potentially genotoxic compounds in sediments collected from United Kingdom estuaries K. V. THOMAS, J. BALAAM, N. BARNARD, R. DYER, C. JONES, J. LAVENDER & M. MCHUGH (UK)
- 259 Photoinductive efficiency of soil extracted humic and fulvic acids J.-P. AGUER, C. RICHARD (France), O. TRUBETSKAYA, O. TRUBETSKOJ (Russia), J. LÉVÈQUE & F. ANDREUX (France)
- 263 Sorption of imazaquin in soils with positive balance of charges W. S. D. ROCHA, J. B. REGITANO, L. R. F. ALLEONI & V. L. TORNISIELO (Brazil)
- 271 Determination of sulfur oxides formed during the S(IV) oxidation in the presence of iron B. PODKRAJŠEK, I. GRGIĆ & J. TURŠIČ (Slovenia)
- 279 Structure—activity relationships for association of linear alkylbenzene sulfonates with activated sludge M. T. GARCÍA, E. CAMPOS, M. DALMAU, I. RIBOSA & J. SÁNCHEZ-LEAL (Spain)

- 287 UV-VIS spectroscopy of 2.4.6-trinitrotoluene-hydroxide reaction D. R. FELT, S. L. LARSON & F. J. VALENTE (USA)
- 297 Biodegradation of aromatic compounds by white rot and ectomycorrhizal fungal species and the accumulation of chlorinated benzoic acid in ectomycorrhizal pine seedlings J. DITTMANN, W. HEYSER & H. BÜCKING (Germany)
- 307 Distribution of inorganic arsenic species in mine tailings of abandoned mines from Korea M.-J. KIM, K.-H. AHN & Y. JUNG (South Korea)
- 313 A GCMSD/ECD method for the simultaneous determination of toxaphene and toxaphene congeners D. C. MACEACHEN & N. COCKS (Canada)
- 315 Metabolism of pyrene by two clam species, Mya arenaria and Protothaca staminea C. D. SIMPSON, W. R. CULLEN, T. Y. T. HE, M. IKONOMOU & K. J. REIMER (Canada)
- 323 Bioaccumulation and elimination of <sup>14</sup>C-lindane by Enchytraeus albidus in artificial (OECD) and a natural soil M. J. DE BARROS AMORIM, J. P. SOUSA, A. J. A. NOGUEIRA & A. M. V. M. SOARES (Portugal)
- 331 Description and evaluation of a sampling system for long-time monitoring of PAHs wet deposition F. CERECEDA-BALIC (Chile), E. KLEIST, H. PRAST, H. SCHLIMPER, H. ENGEL & K. GÜNTHER (Germany)
- 341 Uptake of atmospheric mercury by deionized water and aqueous solutions of inorganic salts at acidic, neutral and alkaline pH D. T. WAITE, A. D. SNIHURA, Y. LIU & G. H. HUANG (Canada)
- 353 Kinetics of hydrolysis and cyclization of ethyl 2-(aminosulfonyl)benzoate to saccharin H. E. DI LORETO, J. CZARNOWSKI & M. DOS SANTOS AFONSO (Argentina)

#### SCIENCE FOR ENVIRONMENTAL TECHNOLOGY

- 363 Key factors in chemical reduction by hydrazine for recovery of precious metals J. P. CHEN & L. L. LIM (Singapore)
- 371 Enhanced dehalogenation of halogenated methanes by bimetallic Cu/Al H.-L. LIEN & W. ZHANG (Taiwan)
- 379 Evaluation of remediation process with plant-derived biosurfactant for recovery of heavy metals from contaminated soils K.-J. HONG, S. TOKUNAGA & T. KAJIUCHI (Japan)
- 389 The promoter effect and a rate expression of the catalytic incineration of (CH<sub>3</sub>)<sub>2</sub>S<sub>2</sub> over an improved CuO-MoO<sub>3</sub>/y-Al<sub>2</sub>O<sub>3</sub> catalyst C.-H. WANG, S.-S. LIN, S.-B. LIOU & H.-S. WENG (Taiwan, ROC)
- 395 A study on toxic organic emissions from batch combustion of styrene C. WESTBLAD (Sweden, USA), Y. A. LEVENDIS, H. RICHTER, J. B. HOWARD & J. CARLSON (USA)
- 413 Kinetics of heat-assisted persulfate oxidation of methyl tert-butyl ether (MTBE) K.-C. HUANG, R. A. COUTTENYE & G. E. HOAG (USA)
- 421 Co-surfactant of ethoxylated sorbitan ester and sorbitan monooleate for enhanced flushing of tetrachlo-
  - C. K.-J. YEH, S.-L. PENG & I.-Y. HSU (Taiwan, ROC)
- 431 Pyrolytic kinetics of sludge from a petrochemical factory wastewater treatment plant—a transition state theory C.-G. CHAO, H.-L. CHIANG & C.-Y. CHEN (Taiwan)
- 439 Composite Tin and Zinc oxide nanocrystalline particles for enhanced charge separation in sensitized degradation of dves J. BANDARA, K. TENNAKONE & P. P. B. JAYATILAKA (Sri Lanka)

## **ENVIRONMENTAL TOXICOLOGY AND RISK ASSESSMENT**

- 447 Pyrene bioavailability; effect of sediment-chemical contact time on routes of uptake in an oligochaete worm A. U. CONRAD. S. D. COMBER & K. SIMKISS (UK)
- 455 Effect of point source removal on mercury bioaccumulation in an industrial pond G. R. SOUTHWORTH, M. J. PETERSON & M. A. BOGLE (USA)
- 461 Importance of considering pesticide stereoisomerism—proposal of a scheme to apply Directive 91/414/EEC framework to pesticide active substances manufactured as isomeric mixtures J. O. MAGRANS, J. L. ALONSO-PRADOS & J. M. GARCÍA-BAUDÍN (Spain)
- 471 Toxicity and bioaccumulation of copper in three green microalgal species H. YAN & G. PAN (China)
- 477 Bioaccumulation of mercury in a vestimentiferan worm living in Kagoshima Bay, Japan T. ANDO, M. YAMAMOTO, T. TOMIYASU, J. HASHIMOTO, T. MIURA, A. NAKANO & S. AKIBA (Japan)
- 485 Enhanced degradation of carbazole and 2,3-dichlorodibenzo-*p*-dioxin in soils by *Pseudomonas resinovorans* strain CA10
  - J. WIDADA (Japan, Indonesia), H. NOJIRI, T. YOSHIDA, H. HABE & T. OMORI (Japan)
- 493 Effects of bacterial counts and temperature on the biodegradation of bisphenol A in river water J.-H. KANG & F. KONDO (Japan)
- 499 A mathematical algorithm to identify toxicity and prioritize pollutants in field sediments F. S. MOWAT & K. J. BUNDY (USA)

## Volume 49 No. 6

#### **ENVIRONMENTAL CHEMISTRY**

- 515 Soot–water distribution coefficients for polychlorinated dibenzo-*p*-dioxins, polychlorinated dibenzofurans and polybrominated diphenylethers determined with the soot cosolvency-column method H. BÄRRING, T. D. BUCHELI, D. BROMAN & Ö. GUSTAFSSON (Sweden)
- 525 Fe(III)-solar light induced degradation of diethyl phthalate (DEP) in aqueous solutions G. MAILHOT, M. SARAKHA, B. LAVEDRINE (France), J. CÁCERES & S. MALATO (Spain)
- 533 Binding of cadmium on raw paper pulp. Relationship between temperature and sorption kinetics C. GARCÍA-GOMEZ, G. CARBONELL & J. V. TARAZONA (Spain)
- 539 Identification and significance of phenazone drugs and their metabolites in ground- and drinking water K. REDDERSEN, T. HEBERER & U. DÜNNBIER (Germany)
- 545 Heavy metals in agricultural soils from Piedmont, Italy. Distribution, speciation and chemometric data treatment
  - O. ABOLLINO, M. ACETO, M. MALANDRINO, E. MENTASTI, C. SARZANINI & F. PETRELLA (Italy)
- 559 Influence of heavy metals on the microbial degradation of diesel fuel V. RIIS, W. BABEL (Germany) & O. H. PUCCI (Argentina)
- 569 Retention behavior of hydrophobic organic chemicals as a function of temperature in soil leaching column chromatography
  X. LIANG, F. XU, B. LIN, F. SU (China), K.-W. SCHRAMM & A. KETTRUP (Germany)
- 575 Trace element concentration in tree-rings biomonitoring centuries of environmental change K. L. PADILLA & K. A. ANDERSON (USA)
- 587 Isotopic fractionation during reductive dechlorination of trichloroethene by zero-valent iron: influence of surface treatment G. F. SLATER (USA, Canada), B. S. LOLLAR (Canada), R. A. KING (USA) & S. O'HANNESIN (Canada)

- 597 Investigations on the binding mechanism of the herbicide simazine to dissolved organic matter in leachates of compost
  - T. ERTUNC, N. HARTLIEB, A. BERNS, W. KLEIN & A. SCHAEFFER (Germany)
- 605 Arsenic and other heavy metals in soils from an arsenic-affected area of West Bengal, India T. ROYCHOWDHURY, T. UCHINO, H. TOKUNAGA & M. ANDO (Japan)
- 619 Effects of surface coatings on electrochemical properties and contaminant sorption of clay minerals J. ZHUANG (USA) & G.-R. YU (PR China)
- 629 Studies of metal-binding sites in natural organic matter and their role in the generation of disinfection byproducts using lanthanide ion probes C.-W. LI (Taiwan) & G. V. KORSHIN (USA)
- 637 Comparison of the combined monitoring-based and modelling-based priority setting scheme with partial order theory and random linear extensions for ranking of chemical substances

  D. LERCHE, P. B. SØRENSEN, H. S. LARSEN, L. CARLSEN & O. J. NIELSEN (Denmark)
- 651 Phosphine and methane generation by the addition of organic compounds containing carbon–phosphorus bonds into incubated soil
  S. H. HAN, Y. H. ZHUANG, H. X. ZHANG, Z. J. WANG & J. Z. YANG (China)
- 659 Sorptive behavior of the phenylamide fungicides, mefenoxam and metalaxyl, and their acid metabolite in typical Cameroonian and German soils

  A. MONKIEDJE (Cameroon) & M. SPITELLER (Germany)
- 669 Movement of bromacil and hexazinone in soils of Hawaiian pineapple fields Y. ZHU & O. X. LI (USA)
- 675 Atmospheric conversion of sulfur dioxide to particulate sulfate and nitrogen dioxide to particulate nitrate and gaseous nitric acid in an urban area M. I. KHODER (Egypt)
- 685 Decarboxylation and alkaline colour fading reactions in presence of humic substances M. KLAVINS & K. BABRE (Latvia)

### PERSISTENT ORGANIC POLLUTANTS AND DIOXINS

- 691 Effect of reaction time on PCDD and PCDF formation by de novo synthetic reactions under oxygen deficient and rich atmosphere R. GRABIC, V. PEKÁREK, J. ULLRICH, M. PUNČOCHÁŘ, E. FIŠEROVÁ, J. KARBAN & M. ŠEBESTOVÁ (Czech Republic)
- 697 Surveillance programme on dioxin levels in ambient air sites in Catalonia (Spain)
  E. ABAD, J. CAIXACH, J. RIVERA, L. GUSTEMS, G. MASSAGUÉ & O. PUIG (Spain)
- 703 HPLC-PFD determination of priority pollutant PAHs in water, sediment, and semipermeable membrane devices
  - K. S. WILLIAMSON, J. D. PETTY, J. N. HUCKINS, J. A. LEBO & E. M. KAISER (USA)
- 717 Sequestration of priority pollutant PAHs from sediment pore water employing semipermeable membrane devices
  - K. S. WILLIAMSON, J. D. PETTY, J. N. HUCKINS, J. A. LEBO & E. M. KAISER (USA)
- 731 Comparisons of PBDE composition and concentration in fish collected from the Detroit River, MI and Des Plaines River, IL
  C. P. RICE, S. M. CHERNYAK, L. BEGNOCHE, R. QUINTAL & J. HICKEY (USA)
  - Decelerization of DDBD by short calls and correlation with the transformation of DCD
- 739 Decolorization of RBBR by plant cells and correlation with the transformation of PCBs L. CHROMA, T. MACEK, K. DEMNEROVA & M. MACKOVÁ (Czech Republic)
- 749 Polychlorinated dibenzo-p-dioxins and dibenzofurans in River Po sediments E. FATTORE, L. VIGANÒ, G. MARIANI, A. GUZZI, E. BENFENATI & R. FANELLI (Italy)

- 755 Regional measurements of PCDD/PCDF concentrations in Korean atmosphere and comparison with gasparticle partitioning models J.-S. PARK & J.-G. KIM (South Korea)
- 765 Levels of dioxins in fish and fishery products on the German market H. KARL, U. RUOFF & A. BLÜTHGEN (Germany)

#### SPECIAL ISSUE: NEW HORIZONS IN THE CARBON CYCLE

- 775 Editorial: New horizons in the carbon cycle J. ADAMS (USA)
- 777 Geologic emissions of methane to the atmosphere G. ETIOPE (Italy) & R. W. KLUSMAN (USA)
- 791 Uncertainties and novel prospects in the study of the soil carbon dynamics Y. WANG & Y.-P. HSIEH (USA)
- 805 Uncertainties in the role of land vegetation in the carbon cycle J. M. ADAMS (USA) & G. PIOVESAN (Italy)
- 821 Carbon storage in Amazonia during the Last Glacial Maximum: secondary data and uncertainties B. TURCQ (France), R. C. CORDEIRO (Brazil), A. SIFEDDINE (France, Brazil), F. F. L. SIMÕES FILHO, A. L. S. ALBUQUERQUE & J. J. ABRÃO (Brazil)
- 837 The contribution of reactive carbon emissions from vegetation to the carbon balance of terrestrial ecosystems A. GUENTHER (USA)
- 845 Holocene biomass burning and global dynamics of the carbon cycle
  C. CARCAILLET (Sweden), H. ALMQUIST (USA), H. ASNONG (Canada), R. H. W. BRADSHAW (Denmark),
  J. S. CARRIÓN (Spain), M.-J. GAILLARD (Sweden), K. GAJEWSKI (Canada), J. N. HAAS (Austria), S. G.
  HABERLE (Australia), P. HADORN, S. D. MÜLLER (Switzerland), P. J. H. RICHARD (Canada), I. RICHOZ
  (Germany), M. RÖSCH (France), M. F. SÁNCHEZ GOÑI (UK), H. VON STEDINGK (Sweden), A. C.
  STEVENSON (France), B. TALON (Switzerland), C. TARDY (France), W. TINNER (Switzerland), E.
  TRYTERUD (Norway), L. WICK (Switzerland) & K. J. WILLIS (UK)

#### Volume 49 No. 9

## SPECIAL ISSUE: COMBUSTION PARTICLES — EXPOSURE ASSESSMENT METHODS

865 Preface

### Introduction

867 Editorial: Why particles?

K. R. SMITH (USA) & M. JANTUNEN (Italy)

### **Joint Reports**

- 873 Chapter one: exposure measurements
  J. C. CHOW, J. P. ENGELBRECHT, N. C. G. FREEMAN (USA), J. H. HASHIM (Malaysia), M. JANTUNEN
  (Finland), J.-P. MICHAUD (USA), S. SAENZ DE TEJADA (Guatemala), J. G. WATSON (USA), F. WEI
  (People's Republic of China), W. E. WILSON (USA), M. YASUNO (Japan) & T. ZHU (People's Republic of China)
- 903 Chapter two: methodologies for characterisation of combustion sources and for quantification of their emissions A. P. MITRA (India), L. MORAWSKA (Australia), C. SHARMA (India) & J. ZHANG (USA)
- 923 Chapter three: methodology of exposure modeling D. J. MOSCHANDREAS, J. WATSON (USA), P. D'ABRETON (South Africa), J. SCIRE (USA), T. ZHU (China), W. KLEIN (Germany) & S. SAKSENA (India)

947 Policy uses of particulate exposure estimates M. BRAUER (Canada), J. S. EVANS, H. K. FLORIG, K. PHONBOON (USA, Thailand), S. SAKSENA (USA, India) & G. SONG (P.B. China)

## **Exposure Measurements**

- 961 Designing monitoring networks to represent outdoor human exposure
  J. C. CHOW, J. P. ENGELBRECHT, J. G. WATSON, W. E. WILSON, N. H. FRANK (USA) & T. ZHU (China)
- 979 Methods for collecting time/activity pattern information related to exposure to combustion products N. C. G. FREEMAN & S. SAENZ DE TEJADA (USA)
- 993 Fine PM measurements: personal and indoor air monitoring
  M. JANTUNEN (Italy), O. HÄNNINEN, K. KOISTINEN (Finland) & J. H. HASHIM (Malaysia)
- 1009 Monitoring of particulate matter outdoors W. E. WILSON, J. C. CHOW, C. CLAIBORN (USA), W. FUSHENG (China), J. ENGELBRECHT & J. G. WATSON (USA)

## Sources

- 1045 Combustion sources of particles. 1. Health relevance and source signatures L. MORAWSKA (Australia) & J. ZHANG (USA, UK)
- 1059 Combustion sources of particles: 2. Emission factors and measurement methods J. ZHANG (USA, UK) & L. MORAWSKA (Australia)
- 1075 Exposure efficiency: an idea whose time has come?

  J. S. EVANS, S. K. WOLFF (USA), K. PHONBOON (Thailand), J. I. LEVY & K. R. SMITH (USA)

## **Exposure Modeling**

- 1093 Receptor modeling application framework for particle source apportionment J. G. WATSON (USA), T. ZHU (People's Republic of China), J. C. CHOW, J. ENGELBRECHT, E. M. FUJITA & W. E. WILSON (USA)
- 1137 Modeling exposure to particulate matter
  D. J. MOSCHANDREAS (USA) & S. SAKSENA (India)

#### **Policy Uses of Particulate Exposure Estimates**

- 1151 Accessible tools for classification of exposure to particles M. BRAUER (Canada) & S. SAKSENA (India)
- 1163 Evolution of particulate regulation in China—prospects and challenges of exposure-based control H. K. FLORIG, G. SUN (USA) & G. SONG (China)
- 1175 Indian aerosols: present status
  A. P. MITRA & C. SHARMA (India)

## Volume 49 No. 10

## **ENVIRONMENTAL CHEMISTRY**

- 1191 Copper complexation by dissolved organic matter and uncertainty assessment of their stability constants K. G. J. NIEROP, B. JANSEN, J. A. VRUGT & J. M. VERSTRATEN (The Netherlands)
- 1201 Comparative assessment of methods to develop QSARs for the prediction of the toxicity of phenols to Tetrahymena pyriformis
   M. T. D. CRONIN (UK), A. O. APTULA (Germany), J. C. DUFFY, T. I. NETZEVA (UK, Bulgaria), P. H. ROWE (UK), I. V. VALKOVA (Bulgaria) & T. W. SCHULTZ (USA)
- 1223 Azo-dyes photocatalytic degradation in aqueous suspension of TiO<sub>2</sub> under solar irradiation V. AUGUGLIARO, C. BAIOCCHI, A. B. PREVOT, E. GARCÍA-LÓPEZ, V. LODDO (Italy), S. MALATO (Spain), G. MARCÍ, L. PALMISANO, M. PAZZI & E. PRAMAURO (Italy)

- 1231 Resistant sorption of in situ chlorobenzenes and a polychlorinated biphenyl in river Rhine suspended matter TH. E. M. TEN HULSCHER, B. A. VRIND, P. C. M. VAN NOORT & H. A. J. GOVERS (The Netherlands)
- 1239 Behavior of PAHs during cold storage of historically contaminated soil samples
  H. ROST, A. P. LOIBNER, M. HASINGER, R. BRAUN & O. H. J. SZOLAR (Austria)
- 1247 Monoterpene emissions and carbonyl compound air concentrations during the blooming period of rape (Brassica napus)
  K. MÜLLER, M. PELZING, T. GNAUK, A. KAPPE, U. TEICHMANN, G. SPINDLER, S. HAFERKORN, Y. JAHN & H. HERRMANN (Germany)
- 1257 Laboratory shake flask batch tests can predict field biodegradation of aniline in the Rhine L. TORÄNG (Denmark), P. REUSCHENBACH, B. MÜLLER (Germany) & N. NYHOLM (Denmark)
- 1267 The effect of particle size reduction by grinding on subsampling variance for explosives residues in soil M. E. WALSH, C. A. RAMSEY & T. F. JENKINS (USA)
- 1275 Quality of roof runoff waters from an urban region (Gdańsk, Poland) Ż. POLKOWSKA (Poland), T. GÓRECKI (Canada) & J. NAMIEŚNIK (Poland)
- 1285 Sorption of lambda-cyhalothrin, cypermethrin, deltamethrin and fenvalerate to quartz, corundum, kaolinite and montmorillonite
  H. CHAAIERI OUDOU & H. C. BRUUN HANSEN (Denmark)
- 1295 Occurrence and microbial degradation of phthalate esters in Taiwan river sediments S. Y. YUAN, C. LIU, C. S. LIAO & B. V. CHANG (Taiwan, ROC)
- 1301 Distribution of heavy metal contents of urban soils in parks of Seville L. MADRID, E. DÍAZ-BARRIENTOS & F. MADRID (Spain)
- 1309 Simultaneous sorption of lead and chlorobenzene by organobentonite J.-J. LEE, J. CHOI & J.-W. PARK (South Korea)
- 1317 Reverse quantitative structure–activity relationship for modelling the sorption of esfenvalerate to dissolved organic matter A multivariate approach
  M. THOMSEN, S. DOBEL, P. LASSEN, L. CARLSEN, B. B. MOGENSEN & P. E. HANSEN (Denmark)
- 1327 Characterisation of humic materials of different origin: A multivariate approach for quantifying the latent properties of dissolved organic matter M. THOMSEN, P. LASSEN, S. DOBEL, P. E. HANSEN, L. CARLSEN & B. B. MOGENSEN (Denmark)
- 1339 Enantiomer fractions of chiral organochlorine pesticides and polychlorinated biphenyls in standard and certified reference materials
  C. S. WONG, P. F. HOEKSTRA, H. KARLSSON, S. M. BACKUS, S. A. MABURY & D. C. G. MUIR (Canada)
- 1349 Solid-phase microextraction coupled with atomic emission spectroscopy—rapid screening for volatile chlorinated compounds
  S. I. SEMB, S. PEDERSEN-BJERGAARD & E. M. BREVIK (Norway)
- 1357 Pesticide residues in biological waste
  J. TAUBE, K. VORKAMP, M. FÖRSTER & R. HERRMANN (Germany)
- 1367 Distribution coefficients (K<sub>d</sub>) and desorption rates of <sup>137</sup>Cs and <sup>241</sup>Am in Black Sea sediments S. TOPCUOĞLU, N. GÜNGÖR & Ç. KIRBAŞOĞLU (Turkey)
- 1375 Abiotic behavior of entrapped petroleum products in the subsurface during leaching I. DROR, Z. GERSTL (Israel), R. PROST (France) & B. YARON (Israel, France)
- 1389 Nitrogen trace gas emissions from a riparian ecosystem in southern Appalachia J. T. WALKER, C. D. GERON, J. M. VOSE & W. T. SWANK (USA)
- 1399 An experimental ecotoxicological study and its application to the behavioural study of organic mercury (CH<sub>3</sub>HgCl) in the environment: influence of temperature and pH S. JAHANBAKHT, F. LIVARDJANI & A. JAEGER (France)

